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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/492,728 | 01/27/2000 | Rex A. Naden | 73169-TS019 | 1299 |
| 4586 | 7590 | 08/15/2005 | EXAMINER | |
| ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043 | | | YENKE, BRIAN P | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2614 | |

DATE MAILED: 08/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/492,728

Applicant(s)

NADEN, REX A.

Examiner

BRIAN P. YENKE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE/Amendment (03 June 2005).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03 June 05 has been entered.
2. Applicant's arguments filed 03 June 2005 have been fully considered but they are not persuasive.

Applicant's Arguments

- a) The applicant states that "graphical image data of [a] shared image" "to and from a projector wireless transceiver" and "simultaneously modify the same shared image and transfer the modified image" overcomes the art of record.

Examiner's Response

- a) The examiner disagrees. During the previous Interview (03 June 05), the applicant stated that since May only transmits the changes made to a file and transmits the changes to a users station for updating, May does not transmit the modified graphical image which requires no further modification. After further review of the applicant's specification it is noted by the examiner, the applicant discloses that the original object form is the compressed form (page 1, 2nd paragraph). Also, since Flohr discloses that data may be transmitted in the compressed format the concept is not inventive, and the limitation is still met. Although, May does not

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explicitly recite the term "compression", May does disclose transmitting the changes, which is the very definition/scheme behind compression, thus both references are geared towards the reduction of bandwidth in the transmission/reception of data. Thus the claimed modified image/graphical image which is compressed in the applicant's invention is also compressed in the art of record, thus the limitation is met. Upon further review of the applicant's specification, the inventive concept is the conversion of compressed data (object form) into a raster scanned signal at the projector itself. Since none of the pending claims recite such a limitation, a search has not been performed concerning such.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3a. Claims 1-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Flohr, US 5,374,952 in view of Narayanaswami, US Patent Application Publication 2001/0013890 and May et al., US 6,574,674.

In considering claims 1, 10 and 14,

b) the claimed at least a first and second data appliance...is met by portable computers 10 (Figs 1 and 2), which includes a modulator/demodulator 24 and a camera 36 included in video camera unit 11 to pick up the image of the conferee, where the computer receives and transmits information via CATV cable 18 and RF LAN cable 16, where an image received is displayed on

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screen 32 (Fig 1). Flohr discloses a system where a videoconferencing network can send/retrieve data to a single station in the local network without require a dedicated computer to manage the system.

However, Flohr does not specifically disclose a “projection system” or “projector” or “common protocol wireless network”. Flohr discloses a videoconferencing system which can transmit/receive data to include video locally or the conferees located outside the local network (i.e. outside world) which is displayed both locally and outside.

It is noted by the examiner, the applicant also discloses (page 10, line 21-22), that the combination projector and screen 16 may be replaced by a flat panel display system.

Therefore, it would have been obvious to one of ordinary skill in the art to modify Flohr which discloses a video conferencing system, to utilize a projector or flat screen display in order to display data when multiple conferees are at a location where each user does not have a display, to thereby produce/provide the video for the conferees of the video conference.

Regarding the wireless limitation. Flohr discloses a system which connects the computers which may communicate individually to on another or to multiple computers via a RF LAN.

The examiner incorporates Narayanaswami, US Patent Application 2001/0013890 which discloses a videoconferencing system where a remote computing device (PDA) 100 is able to transmit/receive data either wirelessly or thru a high speed wired (USB or firewire, column 4, line 31-35) to another computer PC 136 (Fig 4).

Thus, the transmission/reception of data via a wireless medium is conventional in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Flohr which discloses a videoconferencing network to exchange data using a RF LAN, with Narayanaswami in order to provide a wireless videoconferencing system, in order to provide portability to the conferees and thus eliminating the need for cabling (RF LAN cable) in connecting current and additional users.

Regarding the shared image and the capability to modify the shared image. The combination of Flohr and Narayanaswami do not explicitly recite modifying the shared image. As stated above the combination of Flohr and Narayanaswami discloses a wireless network videoconferencing system which can transmit/receive data to include video locally or the conferees located outside the local network (i.e. outside world) which is displayed both locally and outside the local network.

Although it is conventional to modify a shared image, nonetheless the examiner incorporates May et al., US 6,574,674, which discloses a system which allows each user at each computer to modify and view an image, where the users can view each modification performed by themselves and others on the shared image. May discloses an application program where the users are able to view and modify a share whiteboard application, in order to provide the users the ability to modify an view along with the other participants the changes made to the image.

Therefore, it would have been obvious to one of ordinary skill in the art to modify the Flohr and Narayanaswami combination which discloses a wireless network videoconferencing system which can transmit/receive data to include video locally or to the conferees located outside the local network which can be displayed by all conferees by using a shared application program as done by May in order to provide the conferees the ability to modify and view the

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same data, thus providing a videoconferencing system where all conferees have access to the same information.

In considering claims 2-3,

Flohr discloses a system where multiple personal computers (PC2...PCX) are connected via a RF LAN and may communicate individually to one another or to multiple computers.

Also as disclosed above, Flohr's invention was a modification in prior art, alleviating the need for a central dedicated computer to manage the system, therefore, the use of a central computer (i.e. projector) would have been an obvious embodiment to one of ordinary skill in the art.

In considering claims 4-5,

Flohr discloses a system where the personal computers (PC2...PCX) can communicate to the outside world, where server PC 1 can be utilized if desired to perform certain common functions which are not readily or efficiently implemented in each workstation PC2...PC, such as combining television images on a plurality of channels into a composite image for transmission (col 10, line 15-23). Each personal computer includes a modulating and demodulating circuit board 24 to convert to and from baseband video signals. Also when conferencing with the outside world and A/D, D/A 28 and modulator/demodulator 24 are used to transmit and receive outside data/services.

In considering claims 6 and 11,

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Flohr discloses that each workstation computer has a keyboard 46, processor 34, monitor 32, and a video camera unit 11, with camera 36, microphone 38 and speaker 40, where Flohr discloses receiving the compressed data and decompressing the compressed data via digital decoder 206 which decompresses the signal and separates the video and audio portions (col 18, line 43-52) for display.

However, Flohr remains silent on the use of a MUX. Flohr discloses a system where the signals sent out on the RF LAN are compressed (Fig 21), and the signals that are received by each personal computer (workstation) decompress the transmitted compressed image for display. Flohr discloses that computer circuitry or a video display processor is required to convert video signals into the standard or protocol required to operate the display (col 2; line 5-10).

The examiner takes "OFFICIAL NOTICE" in regards to a MUX (switch).

The use of multiplexers or switches are conventional in the art, where a system/controller is able to select an appropriate scheme/format based on the type of data signal used, and the type of operation that will be carried out (display, transmit/receive).

Therefore, it would have been clearly obvious to one of ordinary skill in the art to utilize a MUX (switch), with Flohr which discloses a transmitting/receiving and displaying an information signal which can be analog or digital, which conveys information such as data or graphics, where the information signal may include a "data signal" and/or a television signal (col 2, line 11-17), in order to select the appropriate algorithm/scheme/format for display of the received data.

In considering claim 7,

Flohr discloses a system where the signals sent out on the RF LAN are compressed (Fig 21), and the signals that are received by each personal computer (workstation) decompress the transmitted compressed image for display.

In considering claim 8,

Flohr discloses receiving the compressed data and decompressing the compressed data via digital decoder 206 which decompresses the signal and separates the video and audio portions (col 18, line 43-52).

In considering claim 9,

Flohr discloses a system where the “information signal” is intended to mean any signal, analog or digital, which conveys information such as data or graphics. And also, Flohr discloses the information signal may include a “data signal” and/or a television signal (col 2, line 11-17).

In considering claim 12,

Flohr discloses a system where the signals sent out on the RF LAN are compressed (Fig 21), and the signals that are received by each personal computer (workstation) decompress the transmitted compressed image for display.

In considering claim 13,

Flohr discloses receiving the compressed data and decompressing the compressed data via digital decoder 206 which decompresses the signal and separates the video and audio portions (col 18, line 43-52).

In considering claims 15-19,

Flohr discloses a system where multiple workstations PC2...PCX (Fig 1) may transfer an information signal to multiple workstations or a selected workstation which are local conferees and also transfer an information signal to the outside world under control of server PC 1. Thus each workstation has an transmitter/receiver, which can receive/transmit an information signal to another/multiple workstations, or to the outside world (external network).

Regarding the “common-protocol wireless network” limitation, refer to comments claim 1 above.

In considering claim 20,

Flohr discloses a system where the “information signal” is intended to mean any signal, analog or digital, which conveys information such as data or graphics. And also, Flohr discloses the information signal may include a “data signal” and/or a television signal (col 2, line 11-17).

In considering claim 21,

Flohr discloses a system where the signals sent out on the RF LAN are compressed (Fig 21), and the signals that are received by each personal computer (workstation) decompress the transmitted compressed image for display.

In considering claim 22,

Flohr discloses receiving the compressed data and decompressing the compressed data via digital decoder 206 which decompresses the signal and separates the video and audio portions (col 18, line 43-52).

In considering claims 23 and 26-27,

Flohr discloses transferring information signals to another computer or external network where the data messages sent by RF LAN of the first computer is sent via the transmitter of the first computer to the controller/receiver of the appropriate workstation or to the external network under control of server PC 1.

Regarding the “common-protocol wireless network” limitation, refer to comments claim 1 above.

In considering claims 24 and 28,

Flohr discloses transferring information signals to another computer or external network where the data messages sent by RF LAN of the first computer is sent via the transmitter of the first computer to the controller/receiver of the appropriate workstation or to the external network under control of server PC 1. Also, the first workstation can receive and transmit simultaneously (col 9, line 10-12), where another workstation (i.e. second computer) can transmit second control data to the receiver/controller of the first computer or another computer.

Regarding the “common-protocol wireless network” limitation, refer to comments claim 1 above.

In considering claims 25 and 29,

Flohr discloses transferring information signals to another computer or external network where the data messages sent by RF LAN of the first computer is sent via the transmitter of the first computer to the controller/receiver of the appropriate workstation or to the external network under control of server PC 1.

Regarding the “common-protocol wireless network” limitation, refer to comments claim 1 above.

3b. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flohr, US 5,374,952 in view of Narayanaswami, US Patent Application Publication 2001/0013890, May et al., US 6,574,674 and FCC 96-193 (Federal Communication Commission, Notice of Proposed Rule Making, released 6 May 1996).

In considering claims 30-32,

Neither the combination of Flohr, Narayanaswami and May disclose a system wherein the common-protocol network operates at frequencies at approximately 5 GHz.

The combination of Flohr, Narayanaswami and May disclose a shared application wireless videoconferencing network where each conferee can transmit/receive data to local/non-local network conferees where each conferee can display/modify the transmitted/received data.

The frequency of operation of a wireless system is conventionally dictated by the type of equipment/usage that the wireless frequency would be used for (i.e. garage door openers, alarms

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around 40 MHz, standard cordless phone 40-50 MHz (where non-standard operate around 900 MHz). Thus, based on the particular device and the mandated (by FCC) frequency operation of the device, permits the designer/user to operate the device at a given or varied (scanner, TV) frequency.

The examiner incorporates FCC 96-193 which proposes the available bandwidth of 350 MHz of spectrum at the 5.15-5.35 GHz and 5.725-5.875 GHz range for unlicensed equipment. As proposed by the FCC, the spectrum at 5.15-5.35 and 5.725-5.875 GHz can be used by unlicensed equipment, which support wireless local area networks.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify combination of Flohr, Narayanaswami and May which disclose a shared application wireless videoconferencing network where each conferee can transmit/receive data to local/non-local network conferees and where each conferee can display the transmitted/received data, by operating the shared application wireless network at approximately the 5GHz frequency band to provide the users/designers of the videoconferencing system the ability transmit/receive a wide array of high band, high data rate fixed communications services to the conferees.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure—please see newly cited references on attached form PTO-892.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (571) 272-7359. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John W. Miller, can be reached at (571)272-7352.

Any response to this action should be mailed to:

Commissioner for Patents
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)305-HELP.

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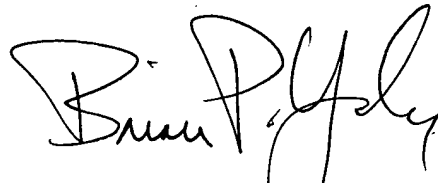
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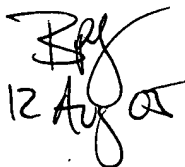
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BRIAN P. YENKE
Primary Examiner
Art Unit 2614


12 Aug 05